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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,412	08/17/2001	Masao Yoshida	2001-1152	4804

513 7590 08/16/2004

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EXAMINER

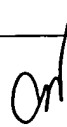
NGUYEN, GEORGE BINH MINH

ART UNIT PAPER NUMBER

3723

DATE MAILED: 08/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/931,412	<b>Applicant(s)</b> YOSHIDA ET AL. 	
	<b>Examiner</b> George Nguyen	<b>Art Unit</b> 3723	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 5-7 and 13-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5-7 and 13-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Receipt is acknowledged of Applicant's amendment filed on May 04 , 2004.

Claims 1-4 and 8-12 were canceled. Claims 14-18 were added.

Thus, claims 5-7 and 14-18 are presented for examination.

Please note that this action is not **Final**.

### ***Allowable Subject Matter***

1. The indicated allowability of claim 13 is withdrawn in view of the newly discovered reference(s) to AAPA (Applicant Admitted Prior Art). Rejections based on the newly cited reference(s) follow.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 5, 13, 15 are rejected under 35 U.S.C. 102(b) as being anticipated by AAPA.

Claims 5, 13, and 15 are fully readable on the AAPA process described on page 2, lines 1-6 together with lines 20-25 wherein applicant notes the conventional process of : (a) supplying a semiconductor wafer from a wafer cassette in the receiving section to a polishing section; (b) polishing the wafer; (c) cleaning the polished wafer; (d) aligning a reference position indicated by an orientation flat or notch of the cleaned wafer with a

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predetermined direction; and (e) returning the wafer to the wafer cassette in the receiving section.

4. Claims 5, 13, and 15 are rejected under 35 U.S.C. 102(a) as being anticipated by Oishi et al.'5,655,954.

With reference to Figs. 1, col. 3, line 40 to col. 26, Oishi discloses the claimed invention including: a) a receiving section 16; b) a processing section 8; and c) a alignment mechanism 2 disposed between said receiving section 16 and said processing section 8.

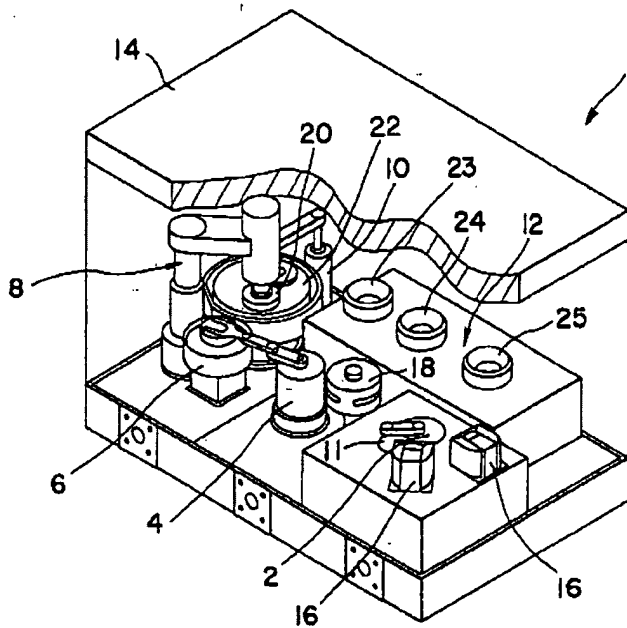


FIG. 1

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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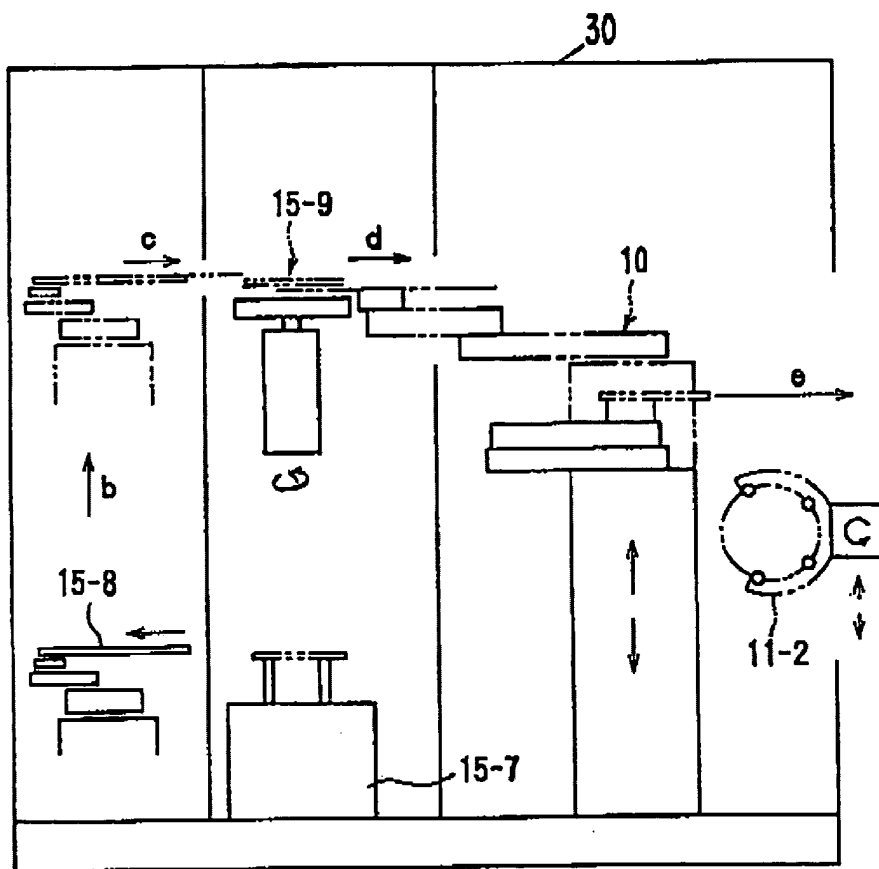
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oishi et al.'954 in view of Okumura et al.'5,885,138.

Oishi has been discussed above, but does not disclose the aligner disposed in a clean room including a partition with a shutter which separates said processing section from said receiving section.

With reference to Fig. 6A, col. 10, lines 49-56, Okumura discloses a position mechanism 10 disposed in a clean room which separates processing room 15-9A and receiving section 11-2.

*FIG. 6*



Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have Oishi's polishing apparatus provided with the aligner disposed in a clean room as taught by Okumura because such modification would prevent further contamination. Regarding to the limitation of "shutter", Oishi discloses this limitation.

7. Claims 7, 14, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oishi et al.'954 in view of Japanese Patent Abstract'60080241. Oishi has been discussed above, but does not disclose the position mechanism set forth in the claims.

With reference to the Abstract, JPA'241 discloses a wafer alignment apparatus with a rotating drive means 20, a rotating angle detection means 60, and a means 50 for detecting existence of substrate. **Please note that a rotating angle detection means 60 is fully readable on the claimed limitation of "a home-position confirming sensor for confirming a home position of said motor"**.

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the Oishi's polishing apparatus with an alignment apparatus as taught by JPA'241 to detect existence of flat by controlling the rotating drive means 20 with the information obtained from substrate detector 50.

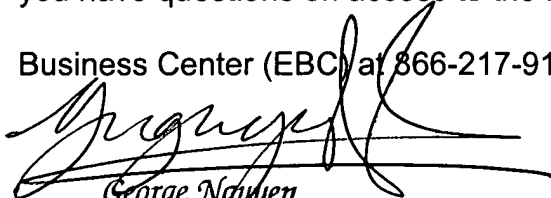
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Nguyen whose telephone number is 703-308-0163. The examiner can normally be reached on Monday-Friday/630AM-300PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 703-308-2687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



*George Nguyen*  
Primary Examiner

George Nguyen  
Primary Examiner  
Art Unit 3723

GN – August 12, 2004